

Bruhat Bangalore Mahanagara Palike										
Construction of CC Road and Drain in Madappanahalli Village Limits										
BAR CHART										
SI No	Description of Work	Unit	BOQ	EXE	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.143, I.No.19.1 of PW, P&IWTDR SR 2018-19)	Cum		321.14						
2	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. MORTH Specification No. 2100. (P.No.222, I.No.27.18 of PW,P&IWTDR S.R 2018-19)	Cum		195.04						
3	KSRRB M2200-5.9. Providing and laying Design mix M20 with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.46cum, with superplastisier @3lts conforming to IS9103-1999 Reaffirmed-2008 including cost of materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. - i) Upto 5 m height.(P.No.227, I.No.28.7.9 of PW, P&IWTDR SR 2018-19)	Cum		9.75						
4	KSRRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregates @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.13, I.No. 4.6 of PW, P&IWTDR SR2017-18)	Cum		17.16						
5	KSRRB M400-19: Construction of Median and island above road level with approved material deposited from borrowpits, spread, sloped and compacted as per Clause 400.7 complete as per specifications. MORTH Specification No.407 (P.No.155 of I.No.20.20 in PW,P&IWTDR SR 2018-19)	cum		60.58						
6	Providing and laying/fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick for flooring conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, including cutting, gridding the edge to half/full round wherever required, labour, curing complete as per specification. (P.No. 109, I.No. 14.62 of PWD SR 2018-19)	cum		150.71						
7	KSRRB M400-17: Providing, laying, spreading and compacting graded stones aggregate to Wet Mix Macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mix method of tipper to site,Laying in uniform layers with paver in subbase/base course on the well prepared surface and compacting with vibratory rollers to achieve the desired density complete as per MORTH specification No. 406.etc with all lead and lifts and as per directions of the Engineer-in-charge(Page No:155 Item No: 20.18, of KPWD SR Bangalore Circle 2018-19)	Sqm		302.88						
8	KSRRB 14.6-1: Providing & laying heavy duty cobble stones 60mm thick interlock pavers,using cement & course sand for manufacture of blocks of approved size ,shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (Avg thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS (P.No 103 of I.No.14.6 in PW,P&IWTDR SR 2018-19)	Sqm		590.30						
9	KSRRB 2.6:Providing and filling Sand in trenches to required depth including watering ramming with all leads and lift. complete as per specification and as directed by Engineer-in-charge (P.No.7, I.No.2.13 of PW,P&IWTDR SR 2018-19)	Cum		102.60						
10	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete. (P.No 27 of I.No.5.30 in PW,P&IWTDR SR 2018-19)	No.		1686.00						



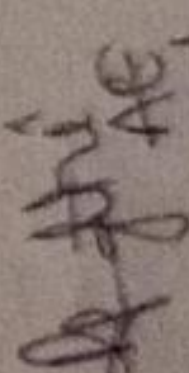
11	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180, Item no.24.1 of KPWD S.R Bangalore Circle 2018-2019)	Sqm	265.81	
12	Providing chain link fencing 50mm size of 8 gauge properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint (P.No.266 of I.No.37.3 in PW,P&IWTDR SR 2018-19)	Sqm	88.20	
13	Supplying and fixing M.S. Rectangular poles made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1:2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 cms. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of the Engineer-in-charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete) (P.No.266 of I.No.37.2 in PW,P&IWTDR SR 2018-19)	m	62.50	
14	Providing and fixing M.S. Block pipe of 38mm dia, of heavy gauge of 14 including removing the bends, cutting the pipe, and fixing pipe in between the existing two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary with all lead and lift as directed by the Engineer-in-charge of work etc., complete including two coats of approved quality paint over one coat of shop paint. (P.No.266 I.No.37.4 of PW,P&IWTDR SR of 2018-19)	m	147.00	
15	Providing and fixing M.S. Gate as per Chief Architect Drawing, using 50mm x 50mm 14 gauge M.S. hollow pipe frame work bent to ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c in two halves and 40mmx6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members as Shown in the drawing etc., complete all the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specification. (P 42/ 1.7.37) PW,P & IWTDR SR -2018-19)	Sqm	2.70	
16	KSRB 15-18.2 : Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications.(P 120/ 1.15.74 PW,P & IWTDR SR - 2018-19)	Sqm	0.00	
17	Direction and Place Identification Signs with size morethan 0.9 sqm Size Board: Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing. with all lead and lift, loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Sqm	0.00	
18	Supply & fixing of Pull Down Challenger : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80-120 microns. All metal parts can be hot-dipped in zinc only when machine that uses a 50% NaCl solution is used.	Unit	2.00	



Athi 24/3/21

19	Supply & fixing of Seated Chest Press : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt corrosion machine that runs a 5% NaCl solution in accordance to ISO 9227 for 96 hours. All metal parts are tested in our salt corrosion machine that runs a 5% NaCl solution in accordance to ISO 9227 for 96 hours.	Unit	2.00	
20	Supply & fixing of Self Weighted Rower : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt corrosion machine that runs a 5% NaCl solution in accordance to ISO 9227 for 96 hours. All metal parts are tested in our salt corrosion machine that runs a 5% NaCl solution in accordance to ISO 9227 for 96 hours.	Unit	2.00	
21	Supply & fixing of Rider : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt corrosion machine that runs a 5% NaCl solution in accordance to ISO 9227 for 96 hours. All metal parts are tested in our salt corrosion machine that runs a 5% NaCl solution in accordance to ISO 9227 for 96 hours.	Unit	2.00	
22	Supply & fixing of Bicycle : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt corrosion machine that runs a 5% NaCl solution in accordance to ISO 9227 for 96 hours. All metal parts are tested in our salt corrosion machine that runs a 5% NaCl solution in accordance to ISO 9227 for 96 hours.	Unit	2.00	



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23	Supply & fixing of Arm & Pedal Bike : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO 9227.	Unit	2.00	
24	Supply & fixing of Tai Chi Spinners : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO 9227.	Unit	2.00	
25	Supply & fixing of Big Shoulder Wheel : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO 9227.	Unit	2.00	
26	Supply & fixing of HD Double Health Walker : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out in excess of at least 50 public park projects in India either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO 9227.	Unit	2.00	

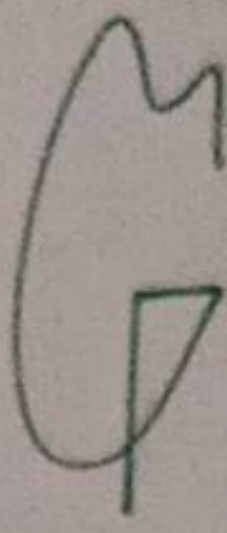


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EIRL-1	KSRRB 200-3. Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means, in area of light jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications. MORTH / Chapter 2(P. 138/18.11)	Sqm	13543.00	
EIRL-2	Removal of Unserviceable Soil with Disposal KSRRB M300-19. Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications. MORTH Specification No. 301(Page No.144 Item No 19.20 of KPWD S.R 2018-19)	Cum	9443.29	
		Planned		
		Executed		



A. J. J. AE
20/3/21


Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92